

Childhood trauma, lifelong damage

How childhood events leave New Mexico's kids at risk

by **Amy Linn** February 19, 2018

On her third day alone in the house, 7-year-old Linda Fritts slept in her safe place in the closet.

She arranged the shelves and fashioned a nest for herself atop a chest of drawers.

"I would take stuffed animals in there and my books in there," she says now.

She read by flashlight, *Nancy Drew* or *The Boxcar Children*, the series about four inexplicably happy orphans who live by themselves in an abandoned freight car.

"I was jealous," Linda says. "They had each other."

That was 1968 or so, when she had a puppy, "and I would take her in the closet, too. And that's how I survived. That and alcohol."

She took her first drink at age 6.

The family lived in Paradise Hills, a then-new and nearly barren development in northwest Albuquerque. Linda remembers eating out of cans and scrounging for food, going to the neighbor boy's house for refuge: "He'd sneak me in after school and feed me."

Her mother was bipolar, a blackout drunk and drug abuser who popped amphetamines supplemented by benzos, pot, Quaaludes and speedballs.

"My mother was a pedophile," Linda says flatly. She remembers being pinned down and sexually abused, and the smell of her mother's Wind Song perfume.

Her father worked as an airplane mechanic, gifted enough to rebuild single-engine airplanes in the front yard. He had schizophrenia.

"I used to tell people, 'I don't have parents. I was raised by wolves,' " she says.

Linda is 56 now, with graying close-cropped hair and a fierce determination to tell her story.

She's worked for 25 years to recover from her ACEs — short for adverse childhood experiences, the official term for what she survived. Looking at the past doesn't scare her anymore.

"I don't really mind talking about what happened to me," she says. "Maybe because, when I was a kid, I never had a voice."

Toxic stress, lasting effects

Today, everyone should be talking about ACEs. That's the view of a growing legion of experts who regard childhood trauma as one of the most profound and urgent public health challenges in the country.

Hundreds of studies link adverse childhood experiences to a huge array of diseases, mental illnesses and lifelong problems. An ACE is defined as one of 10 kinds of trauma, including all the things that happened in Linda's life, and more. Among them: sexual, physical or psychological abuse; emotional or physical neglect; mental illness, drug or alcohol abuse, domestic violence; an absent parent or incarcerated household member.

Exposure to these assaults at a young age can alter brain architecture, interrupt neurocircuitry, damage endocrine and immune systems and have lifelong harmful impacts on health and the human condition, potentially for generations to come.

The "toxic stress" of trauma can impair learning and emotional regulation, undermine social functioning and even change the signature of DNA.

The number of children affected is staggering. In 2016, an estimated 34 million children, nearly half of all U.S. kids under 18, had at least one adverse childhood experience, according to an October 2017 report from the Johns Hopkins Bloomberg School of Public Health. More than one in five had two or more ACEs. So did three-quarters of kids age 3 to 5 who got expelled from preschool.

In New Mexico, the picture is especially alarming. The study's national and state-by-state analysis found nearly 30 percent of New Mexico's children had two or more ACEs — the fourth highest rate in the country.

The state's own agencies catalog long lists of adversities that have profound effects on children's lives, including some of the nation's highest rates of alcohol abuse, opioid and other drug abuse, child abuse, domestic violence, poverty and suicide.

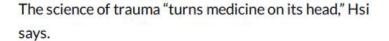
A 2016 study by the New Mexico Sentencing Commission established a clear connection between traumatic experiences and juvenile delinquency. Among all 220 teens held in detention in 2011:

- Every one of the girls 100 percent had two or more ACEs; for boys the rate was 96 percent.
- Nearly 90 percent of both sexes had four or more ACEs, the point at which future health risks can become dire.
- Nearly 25 percent of the girls experienced nine major traumas, almost the entire ACEs catalog. A parent beat them so hard it left marks. They saw their mother punched or threatened with a gun. They'd been raped, molested, verbally abused or constantly humiliated. Someone at home was alcoholic or drug addicted. They'd gone hungry.

The study underscored what could be called an ACEs-to-prison pipeline.

"You're basically creating a group of kids who are going to have lifelong learning problems — they're basically going to be like human roadkill on the economic highway," says primary care physician Andy Hsi, who co-wrote the report with specialists like George Davis, former director of psychiatry for New Mexico's Children, Youth and Families Department.

Hsi is the medical director of The University of New Mexico's program, which he founded in 1990 to provide comprehensive medical care and support to substance-abusing pregnant women and their infants. The program helps traumatized mothers create nurturing bonds with their baby; an infant's brain development suffers in the absence of loving attachment, according to exhaustive research worldwide. Early trauma doesn't merely devastate lives; it gets embedded in the brain and body, research shows.





Andy Hsi at UNM North Valley Clinic. Don J. Usner/Searchlight New Mexico

'No one is doomed'

If this picture appears unremittingly bleak, the bigger message is that all early childhood experiences are powerful. Positive experiences are as determinative as negative ones. They build resilience and give children "protective factors" that help them thrive.

Resilience helps children calm themselves and bounce back from defeats. Even children who suffer severe adversity can develop it, according to Harvard University's Center on the Developing Child, a national leader in toxic stress and brain research. Resilience is built upon healthy early parenting and bonding, which make infants feel safe and nurtured.

"Loving the baby, kissing, holding, massaging, breastfeeding: The baby understands that language," says Sanjeev Arora, a UNM physician and founder of Project ECHO, which brings high-quality medical treatment to remote parts of the state and worldwide. "The entire human experience is very intricately linked to feelings of security and lack of fear."

Resiliency therapy works, affirms Christina Bethell, lead author of the 2017 Johns Hopkins study and director of the university's Child and Adolescent Health Measurement Initiative. Her research underscores the capacity of the infant brain to restore itself.

"History isn't destiny," she says. "No one is doomed."



Don J. Usner/Searchlight New Mexico

Hope that brings change

If Linda Fritts had received counseling when she was a child, back in the late 1960s and early 1970s, no one would have given her trauma-informed care. The concept wasn't born yet.

Child Protective Services didn't investigate. No one paid attention. Her teachers never intervened — not when she cut class, not when she showed up drunk in middle school, not when she dropped out in ninth grade.

"I didn't fall through the cracks," she says. "I blasted through them."

When she was 14, her mother committed suicide. At 17, she married "a raging alcoholic." By her 20s, she was living in a house with no running water and three children under the age of 12.

To make the toilet work, her oldest son would take a bucket to her in-laws' house next door, fill it with water, walk home and pour the water into the toilet to make it flush.

Linda managed to get her GED and a nursing certificate. But as she neared 30, severe depression took over. Plagued by thoughts of suicide, she finally ended up in a hospital clinic.

Help came in the unlikely form of a therapist who filled out her intake papers. She offered to take Linda on as a patient.

"The most important component for successful recovery is having hope," Linda says. It had arrived.

Slowly, she began to take stock. Her children were nearly 12, 6 and 4. For years, she believed she'd been protecting them. She'd tried not to fight with her husband in front of them. She recalled teaching herself to binge drink so she could white-knuckle-it and stay sober when they were around.

But therapy lifted the veil.

She moved into a battered women's shelter and entered a 12-step program. She got a divorce. She came out as a gay woman. Jobs fell into place at an assisted living facility, a hospital and at the Milagro Program for substance-abusing pregnant women, run by Andrew Hsi.

Hsi recalls how she stopped him in his tracks one day. He and Linda had tea, and she told him how even at age 6, alcohol helped her dissociate from the abuse.

"She told me she never could have survived that amount of trauma without alcohol," Hsi says.

He knew, of course, that people used addiction to cope. But he'd never heard someone so articulately describe the need for numbness at such a young age.

Today, Linda has 26 years of sobriety, and counts 25 years in therapy. She married the woman she calls her soul mate. She can talk to her about anything.

She's at community college now, middle-aged and going for her bachelor's degree, aiming to become a social worker. She says she wants to be a wounded healer.

Last semester, she got all A's and B's.



Amy Linn

Amy Linn has written about social issues and child well-being throughout her career, starting at the Miami Herald and including work for the Philadelphia Inquirer, San Francisco Examiner... More by Amy Linn



Deborah Harris, senior consultant for New Mexico's Infant Mental Health Teams, with a baby. Don J. Usner/Searchlight New Mexico

Science reveals severe childhood trauma can alter developing brain, creates lifetime risk

Amy Linn | Searchlight New Mexico

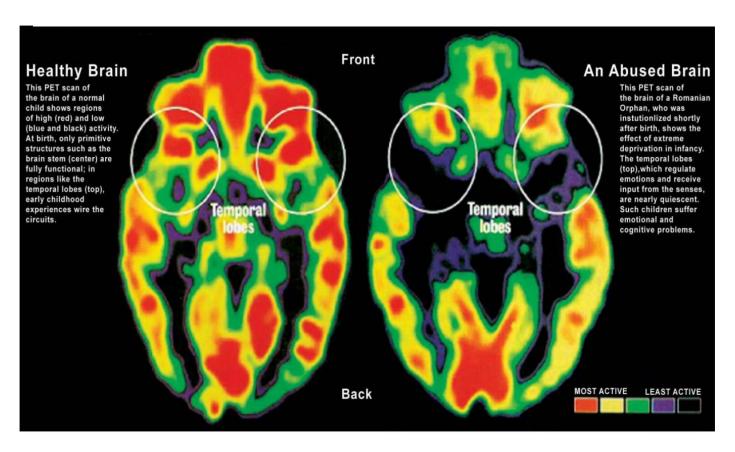
Today, more than at any other time in history, science and medicine show the vast, interconnected dance between a baby's outside world and the core of its being: its brain.

The most basic human connections are being understood through the lens of brain science, neuroscience, behavioral science and beyond, revealed in magnetic resonance imagining at institutes such as Harvard University's Center on the Developing Child.

Today's studies show the harm down to the dendrites and DNA.

Severe trauma, also known as adverse childhood experiences, can leave children in near-constant fear and anxiety, always on the verge of fight-flight-or freeze mode, research shows. The result can be a constant release of stress hormones in the body, harmful enough to alter architecture in the developing brain.

"The biological response to this toxic stress can be incredibly destructive and last a lifetime," the American Academy of Pediatrics described the process in a 2014 policy paper.



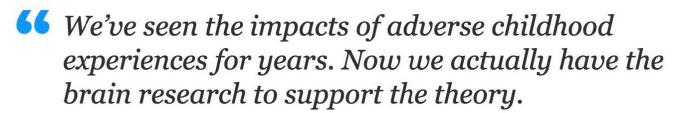
Beatings that leave bruises, sexual or emotional abuse, domestic violence, a drug-addicted parent — those and other major childhood adversities can shrink key parts of the brain, MRI scans show.

"We've seen the impacts of adverse childhood experiences for years," said Deborah Harris, senior consultant for New Mexico's Infant Mental Health Teams. The program sees some of the state's most vulnerable babies, removed from their homes by Child Protective Services for maltreatment. "Now we actually have the brain research to support the theory."

Harris says the science shows how critical it is to give infants and children the services they need. They can't be expected to get over the abuse on their own.

"It's embedded in their brain and body," Harris said.

The concept of adverse childhood experiences, or ACEs, was born in 1998 with a study of more than 17,000 Kaiser Permanente patients in San Diego.



DEBORAH HARRIS, NEW MEXICO'S INFANT MENTAL HEALTH TEAMS SENIOR CONSULTANT

It revealed that physical abuse, sexual abuse and other ACEs were far more common than previously understood. And as the study discovered, the more ACEs people experienced, the more likely they were to have bad outcomes, including drug abuse, alcoholism, mental illness, suicide, cancer and chronic, life-shortening diseases.

The ACE study offered the medical world a new way to understand human development. The brain science has taken it even further.

Brain scans show childhood trauma can cause shrinkage in the hippocampus, the area linked to memory storage and retrieval. The constant state of high-stress can alter the amygdala, the brain's fear-processing center, and affect the neuro-endocrine and immune systems.

Harvard University's Center on the Developing Child defines toxic stress as "excessive or prolonged activation of stress response systems in the body and brain." That sort of activation can lead to dysfunction in the prefrontal cortex, the area of the brain linked to cognition and decision-making.

On one thing, all researchers agree: Trauma is particularly harmful from ages 0 to 3, when more than 1 million new neural connections in the brain are formed every second.

The stress from child maltreatment can hinder the formation of neural pathways, which let neuro-signals zoom across different parts of the brain to form critical connections, research shows.

Scientists now theorize that toxic stress causes epigenetic changes that allow trauma to be transmitted over the generations. The mechanism offers an explanation for the historical trauma experienced by Native Americans, by children of Holocaust survivors, and others.

In response, the AAP has called for "a new basic science of pediatrics," based on an "eco-biodevelopmental" model. It would take into account how children's experiences — and traumas — can shape lives well into the future.

Explore Searchlight New Mexico's complete investigation into child/well-being — including stories, photos, videos, data and more — and learn how you can help at searchlightnm.org.

Healing from damage of childhood trauma is possible, experts say

Amy Linn | Searchlight New Mexico

Reading about adverse childhood experiences and toxic stress can be, well, stressful. The problems they cause — brain impairments, mental illness and disease — are enough to make things sound hopeless.

They're not.

"We're not victims, and we're not unchangeable," said Christina Bethell, coauthor of a 2017 report aptly called Balancing ACEs with HOPE (Health

Outcomes for Positive Experience). Bethell, the director of the Child and Adolescent Health Measurement Initiative at Johns Hopkins University, works in what she calls "the science of thriving."

Positive, loving experiences build brain health and resilience in children; they act as a buffer against the bad things. They also counterbalance the harm from toxic stress, her research shows.

A groundswell of other researchers, brain scientists and mental health professionals say damage from ACEs is reversible and people of all ages — particularly those ages 0 to 3 — can recover.

"There's no such thing as throwaway children," says Deborah Harris, senior consultant for New Mexico's Infant Mental Health Teams.

Childhood trauma is a serious matter. If you've experienced it, experts advise getting help from a trauma-informed specialist, someone experienced in helping people recover from toxic stress.

But everyone can begin the path to wellness.

Healing can start with simple steps like deep breathing. They're as basic as cooing to your baby.

All manner of solutions and research in this realm — as well as simple tools for parents — are available at prominent institutes, such as the Center on the Developing Child at Harvard University.

Helping your baby

The mantra is "the earlier the better." Here are ways to promote brain healing while creating a loving, nurturing relationship:

- Build positive experiences, whether it's through a game of peekaboo or a reading of "Goodnight Moon."
- Coo, babble, point, and make silly faces. Scientists call this "serve and return," and it's key to building brain health.
- Kiss, hold and talk to your baby. Repeat. Repetitive positive experiences build healthful new neural pathways that get stronger over time.
- Ban tobacco at home.
- Breastfeed.

- Share a family meal at least four days a week.
- Limit children to two hours of screen time a day.
- Read to young kids daily. Insist that older children do their homework.
- Participate in your children's activities.

Don't worry about being a perfect parent; be a "good enough" parent. What's good enough? Bethell found that children who are most resilient are those who can say "My family stood by me in hard times; I had someone I could talk to about difficult things."

Helping yourself

Adults also need to reduce stress. Here's what helps:

- Breathing: Yes, breathing. Inhale deeply. Exhale. Repeat.
- Meditation: One of the top recommended interventions, it's restorative for the brain.
- Progressive muscle relaxation: An effective way to relieve tension and anxiety by simply clenching and releasing muscles.
- Exercise. Crunches and half-marathons are not required. The goal is to move and get outside: Research shows that simply touching a tree or hearing a bird sing reduces stress.
- Get enough sleep, eat nutritious food, listen to music and spend time with loving (non-stressful) friends and family.
- Hypnosis: Find a certified clinical hypnotherapist at the American Society of Clinical Hypnosis.
- EMDR: Eye Movement Desensitization and Reprocessing has been used for decades to help people heal from traumatic memories.
- Trauma-Sensitive Yoga: This form of yoga was developed by the Massachusetts-based Trauma Center at the Justice Resource Institute.

- Write the wrongs: Vincent Felitti, co-founder of the ACE study, recommends that patients write their autobiographies.
- Try neurofeedback or its cousin, biofeedback.
- Talk to a compassionate person; get treatment from someone trained in trauma care. Or walk into your doctor's office with the ACE survey.

